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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,493	01/20/2006	Renan Abgrall	0579-1089	6961

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EXAMINER	
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ART UNIT	PAPER NUMBER
2887	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/536,493	ABGRALL ET AL.	
	Examiner	Art Unit	
	KUMIKO C. KOYAMA	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 16-20* is/are rejected.

7)☒ Claim(s) *14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 May 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *0505*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Preliminary Amendment received on May 25, 2005 has been acknowledged.

Specification

1. The abstract of the disclosure is objected to because it includes reference numbers. The Examiner respectfully requests the Applicant to eliminate the reference numbers in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 1-20 are objected to because of the following informalities:

Re claims 1-20: The Examiner respectfully requests the Applicant to eliminate all reference numbers and letters from the claims.

Re claim 1: "it include" should be changed to --the secure electronic entity--.

"measuring the time" should be changed to --measuring a time--.

"if the result" should be changed to --if a result--.

Re claim 2: "the total time" should be changed to --a total time--.

Re claim 3: "the total time" should be changed to --a total time--.

Re claim 8: Is "a secure entity" recited in the claim 8 same as the secure electronic entity in claim 1? If so, "a secure entity" should be changed to --the secure electronic entity--. If not, then the Examiner respectfully requests the Applicant to clearly and distinctively differentiate the two entities.

Re claim 11: "it include" should be changed to --the secure electronic entity--.

"across its dielectric space" should be changed to --across the capacitive component's dielectric space--.

"the residual charge" should be changed to --a residual charge--.

"the electrical power supply" should be changed to --an electrical power supply--.

Re claim 13: "MOS" should be changed to --metal oxide semiconductor (MOS)--.

Re claim 14: "the thickness of the insulative layer of the field effect transistor" should be changed to --a thickness of the insulative layer of the field effect transistor--.

"the thickness of the insulative layer of the capacitive component" should be changed to --a thickness of the insulative layer of the capacitive component--.

Re claim 16: "it include" should be changed to --the secure electronic entity--.

"across its dielectric space" should be changed to --across the capacitive component's dielectric space--.

"across their respective dielectric spaces" should be changed to --across the capacitive component's respective dielectric spaces--.

Re claim 18: "it" should be changed to --the secure electronic entity--.

Re claim 19: "it" should be changed to --the secure electronic entity--.

Re claim 20: "MOS" should be changed to --metal oxide semiconductor (MOS)--.

Appropriate correction is required.

Double Patenting

3. Claims 5 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 4. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-10 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Elizalde et al (US Patent Application Publication No. 2003/0227827 A1).

Re claims 1, 3-10 and 18: Elizalde discloses a card specifically designed for controlling time (Paragraph [0018], lines 1-2). Elizalde discloses that a signal is generated from a power supply which sends an electrical pulse to the microcontroller that includes a real time clock and a crystal oscillator for metering time stretches or segments and reporting them to the process control unit, saving this information on memory and reporting it to the user through the light emitting diodes (Paragraph [0018], lines 3-11). Elizalde discloses expiry time which is a concept defining the card life time, because the device, once it has been initialized performs a time

metering permanently by comparing this variant with a preset data, that once it has been reached the device will be disabled regardless of the credit time (Paragraph [0020], lines 14-18).

Re claim 2: Elizalde discloses that the central processing begins the discount credit time, the remaining time is stored in memory, and reports the available time by turning the respective LED on, namely, each LED involves a japes that can be long, medium or minimum depending on the available time (Paragraph [0021], lines 1-7). This operating mode of the time indicating device enblaes the user to pay only for the time that remains parked on the street, allowing to reuse the device until its credit time be zero, when the device is disabled and can be discarded (col 0021], lines 12-17). The credit time is the lifespan in this case.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizalde in view of Paratore et al (US 6,294,997). The teachings of Elizalde have been discussed above.

Elizalde fails to teach a capacitive component subject to leakage across its dielectric space, means being provided for coupling said capacitive component to an electrical power supply to be charged by said electrical power supply, and means for measuring the residual charge in the capacitive component, said residual charge being at least in part representative of

the time that has elapsed since the capacitive component was decoupled from the electrical power supply.

Paratore discloses that the timing module includes a capacitor, a resistor, an A/D converter, a control circuit and an N-bit register. The timing module is illustrated in communication with memory module 60 of the RFID tag. Once powered by the RFID interrogator, the control circuit causes the capacitor to become charged. If the initial charge voltage across the capacitor is V_o, then the residual voltage V_r will be as follows: $V_r = V_o e^{-t/RC}$ where t is time (seconds), R is the resistance value of resistor (R_3)(ohms), and C is the capacitance value of capacitor (C_3) (farads). Conversely, if the value of the residual voltage V_r is known , then the time t elapsed from the initial charge of capacitor is equal to: $t=(RC)(\log (V_o / V_r))$. (col 4, line 54-col 5, line 5).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Paratore to the teachings of Elizalde in order to provide a timing circuit that is capable of accurately measuring time in a small package, such as a card. Such use of capacitive components enables to the card to be portable while accurately measuring time.

8. Claims 13, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizalde in view of Paratore as applied to claims 11 and 12 above, and further in view of Hennig (US 5,514,995). The teachings of Elizalde as modified by Paratore have been discussed above.

Elizalde as modified by Paratore fails to teach a MOS capacitor.

Hennig discloses a PCMCIA card having a first discharge circuit that includes a MOS capacitor (abstract).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Hennig to the teachings of Elizalde as modified by Paratore in order to reduce the size of the card package by utilizing a reduced size MOS capacitor.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elizalde in view of Hennig (US 5,514,995). The teachings of Elizalde have been discussed above.

Elizalde fails to teach a PCMCIA card.

Hennig discloses a PCMCIA card having a first discharge circuit that includes a MOS capacitor (abstract).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Hennig to the teachings of Elizalde as modified by Paratore in order to reduce the size of the card package by utilizing a reduced size MOS capacitor.

Allowable Subject Matter

10. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Prior art of record, Elizalde, Paratore and Hennig, taken alone or in combination fail to teach a field-effect transistor having an insulative layer, a capacitive component including an

insulative layer, and the thickness of the insulative layer of the field-effect transistor is significantly greater than the thickness of the insulative layer of the capacitive component.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yatsu et al, U.S. Patent Application Publication No. 2001/0019302 A1, discloses a data converter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUMIKO C. KOYAMA whose telephone number is (571)272-2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kumiko C. Koyama/
Primary Examiner, Art Unit 2887
February 28, 2009